

- ARCH 4850* History and Theory of Architecture + Health 3(3)** Introduces relationships between health and architectural settings for health. Examines connections between cultural context, medical thought, health-care delivery, and health facility design within different time periods. Introduces contemporary theories on the relationships between human beings, their health and well-being, and the design of the physical environment. Preq: Consent of instructor.
- ARCH 4880* Architectural Programming and Pre-design 3(3)** Introduces the theory, mechanics, and practice of architectural programming and post-occupancy evaluation. Presents programming as a means to create architectural settings sensitive to the needs of their inhabitants. Emphasizes collaborative methodologies that involve identifying relevant goals, facts, issues, needs, and concepts. Students develop an architectural program. Preq: Consent of instructor.
- ARCH 4890 Internship 1-6(1-6)** Practicum in professional practice. Paid work/study in a variety of related disciplines provides students with hands-on experience in design and fabrication fields relevant to the environmental design professions. Consists of two parts: a professional component, managed by an approved sponsor, and an academic component, taught by the instructor. May be repeated for a maximum of 18 credits. Preq: Consent of instructor and acceptance by sponsor.
- ARCH 4900* Directed Studies 1-5(1-5)** Comprehensive studies and research of special topics not covered in other courses. Emphasis is on field studies, research activities, and current developments in architecture. May be repeated for a maximum of ten credits. Includes Honors sections. Preq: Consent of department chair.
- ARCH 4990 Selected Topics in Architecture 1-3(1-3)** Study of selected topics in architecture. May be repeated for a maximum of nine credits, but only if different topics are covered. Includes Honors sections. Preq: Junior standing.
- ART**
Professors: A.V. Feeser, D.M. Detrich, G.W. Shelnett,
Chair; Associate Professors: D. Donar, C.N. Hung, T. McDonald, A. Wrangle; *Assistant Professors:* T.D. Anderson, B.A. Lauritis, K. Thum, V.A. Zimany; *Senior Lecturers:* J.R. Manson, D.C. Woodward-Detrich; *Lecturer:* L. Dorsey
- ART 1030 Visual Arts Studio 3 (6)** Studio projects in basic visual elements and principles. The development of creative design process, visual organization, and design skills are introduced as a foundation for further study in visual arts.
- ART 1050 Foundation Drawing I 3(3)** Introduction to drawing. Presents exploration of observational drawing practices with an emphasis on structural investigations of form and application of spatial systems. Basic materials and approaches associated with drawing are studied and applied. Preq: Visual Arts major.
- ART 1060 Foundation Drawing II 3(3)** Further exploration of introductory drawing. Emphasizes use of tone and color. Students work primarily with representational categories, developing comprehension of complex forms and spaces in relation to the 2-D planes. Includes use of rigorous observational drawing practices in conjunction with thematic efforts. Preq: ART 1050 or ART 1510.
- ART 1510 Foundations in Visual Art I 3 (6)** Intensive introduction to the fundamentals of visual art. Studio projects, lectures, and discussions introduce topics and projects relative to foundation-level art students. Explores historical and contemporary applications of the elements and principles of design. Preq: Visual Arts major.
- ART 1520 Foundations in Visual Art II 3 (6)** Intensive introduction to the fundamentals of visual art. Studio projects, lectures, and discussions introduce topics and projects relative to foundation-level art students. Explores historical and contemporary applications of the elements and principles of design. Preq: Visual Arts major.
- ART 1530 Orientation to Visual Arts I 1(1)** Introduction to the visual arts profession focusing on issues related to various career opportunities, creativity, problem-solving methodologies, and current thinking in contemporary art. Preq: Visual Arts major.
- ART 2050 Beginning Life Drawing 3 (6)** Primary emphasis is on drawing from the live model. Students' drawing skills and fundamental understanding of the structure and form of the human figure are reviewed through studio practice, augmented by lectures, discussions, demonstrations, and critiques. Addresses historical and contemporary use of the human figure in visual arts. Preq: ART 1060 or ART 1510 or ART 1520.
- ART 2070 Beginning Painting 3 (6)** Introduction to basic materials, methods, and techniques of painting. Primary medium used is acrylic, and other painting media may also be introduced. Emphasizes basic skills in painting plus individual creative development. Preq: ART 1510 and ART 1530 and ART 2050 (Visual Arts majors); ART 1030 (non-Art Majors); ARCH 1520 (Architecture majors); LARC 1520 (Landscape Architecture majors).
- ART 2090 Beginning Sculpture 3 (6)** Studio course investigating the meaning of sculpture through traditional and nontraditional approaches. Establishes a working knowledge of material and process in several media. Personal expression is encouraged and enhanced by employment of problem-solving techniques. Static, temporal, installation, and site specific sculpture is explored. Preq: ART 1510 and ART 1520 and ART 1530 and ART 1540 and ART 2050 (Visual Arts majors); ART 1030 (non-Art majors); ARCH 1520 (Architecture majors); LARC 1520 (Landscape Architecture majors).
- ART 2100 Art Appreciation 3(3)** One-semester lecture survey that introduces the nonmajor to an overview of art and architecture from different time periods and cultures. Students are encouraged to appreciate the contribution to art made by the great masters and to discern different styles, art techniques, and creative traditions. Includes Honors sections.
- ART 2110 Beginning Printmaking 3 (6)** Studio course introducing basic techniques of relief printing, intaglio, lithography, silkscreen, and papermaking. Each semester concentrates on two or three of these techniques. Coursework integrates print-making processes and creativity. Preq: ART 1510 and ART 1520 and ART 1530 and ART 1540 and ART 2050 (Visual Arts majors); ART 1030 (non-Art majors); ARCH 1520 (Architecture majors); LARC 1520 (Landscape Architecture majors).
- ART 2130 Beginning Photography 3 (6)** Introduction to the use of photography as an art medium. Lectures and studio work cover the utilization of the camera, processing, and printing in black and white, with emphasis on perception and creative expression. Preq: ART 1510 and ART 1520 and ART 1530 and ART 1540 and ART 2050 (Visual Arts majors); ART 1030 (non-Art majors); ARCH 1520 (Architecture majors); LARC 1520 (Landscape Architecture majors).
- ART 2150 Beginning Graphic Design 3 (6)** Introduction to fundamental techniques, concepts, and principles of visual communication. Through a series of projects and studio work, students explore techniques of communication through the use of type design, typography, photography, illustration, symbolism, and product design. Individual creative development is stressed. Preq: ART 1510 and ART 1520 and ART 1530 and ART 1540 and ART 2050 (Visual Arts majors); ART 1030 (non-Art majors); ARCH 1520 (Architecture majors); LARC 1520 (Landscape Architecture majors).
- ART 2170 Beginning Ceramics 3 (6)** Basic studio course introducing ceramic art through its various processes and techniques. Hand building methods as well as throwing on the potter's wheel are developed. Weekly projects emphasize imagination, self-expression, and skill development. Ceramic history is introduced through slide lectures. Preq: ART 1510 and ART 1520 and ART 1530 and ART 1540 and ART 2050 (Visual Arts majors); ART 1030 (non-Art majors); ARCH 1520 (Architecture majors); LARC 1520 (Landscape Architecture majors).
- ART 2210 Beginning New Media 3 (6)** Explores new media art practices and ideas. Digital tools and processes are explored relative to drawing, painting, printing, bookmaking, and photography. Introduces new media as a context of new collective, interactive, and social modes of art production. Preq: ART 1060 and ART 1510 and ART 1520.
- ART 2230 Woodworking Studio 3 (6)** Introduces woodworking explorations in sculpture and furniture design emphasizing technical understanding and creative application of woodworking processes and methodologies. Students experiment with wood as a vehicle for personal expression and thematic development and conduct research on the historical impact of woodworking in the visual arts. Preq: ART 1510; and one of ART 1520 or ARCH 1520 or LARC 1520.

- ART 3050 Intermediate Drawing 3 (6)** Presents drawing problems and processes directed toward the production of thematically driven projects. Exploration of diverse drawing media. Emphasizes further development of drawing skills, relationships of materials/techniques to subject matter, and the study of contemporary issues in drawing. Preq: ART 2050.
- ART 3070 Painting 3 (6)** Continuation of ART 2070 with increased emphasis on personal expression and growth in technical competence. Some study of painting history is included in studio activity. Preq: ART 2070.
- ART 3090 Sculpture 3 (6)** Continuation of ART 2090 with increased emphasis on personal expression and content of work. Further exploration of materials and processes, including an introduction to foundry casting and advanced welding techniques. Individual investigation into current and historical aspects of sculpture is required. Preq: ART 2090.
- ART 3110 Printmaking 3 (6)** Continuation of processes in beginning printmaking emphasizing expanding the range and depth of technique. The relationship of technique and process to creative idea development is emphasized. Preq: ART 2110.
- ART 3120 Printmaking Research I 1-3(1-3)** Continuation of ART 3110. Technical and conceptual research in printmaking to develop self-expression. Special projects are constructed in consultation with instructor. May be repeated for a maximum of five credits. Preq: ART 3110.
- ART 3130 Photography 3 (6)** Continuation of ART 2130. Advanced techniques and more diverse types of film and paper are used in making images of personal and expressive nature. The design and construction of a view camera, printing in color, and multiple imagery may also be included. Preq: ART 2130.
- ART 3150 Graphic Design 3 (6)** Continuation of concepts and techniques introduced in ART 2150 with emphasis on more applied projects. Individual creative solutions are emphasized. Preq: ART 2150.
- ART 3170 Ceramic Arts 3 (6)** Continuation of skill development leading to more challenging projects and independent efforts. Further exposure to ceramic history and ceramic technology is presented. Preq: ART 2170.
- ART 3180 Ceramics Research I 1-3(1-3)** Continuation of ART 3170. Technical and conceptual research in ceramics for the purpose of self-expression. Projects are constructed in consultation with instructor. May be repeated for a maximum of five credits. Preq: ART 3170.
- ART 3210 New Media Art II 3 (6)** Intermediate-level course that introduces students to time-based art practices such as video art, installation, and performance art forms. Through regularly scheduled studio projects, readings, and screenings, students develop video, installation, and motion graphic techniques, and receive a historical overview of time-based art practices. Preq: ART 2210.
- ART 3230 Digital Sculpture 3 (6)** Studio course covering digital processes applied to making sculpture. Explores digital media as a resource for creative development, creating digital renderings of sculptures, and the fabrication of models and sculptures using CNC technology. Preq: ART 2090 and ART 3210.
- ART 3550 Atelier InSite Creative Inquiry I 3 (6)** An in-depth examination and research of Site Specific Public Art as it currently exists. Course provides critically considered and appropriate artwork for new building projects on the Clemson University campus. Open to students from a wide variety of programs who are interested in this interdisciplinary collaborative endeavor.
- ART 3570 Community Supported Art - Creative Inquiry 1-3(2-6)** Examination and research of arts non-profit fundraising models in various iterations. This course provides a sampling of professional marketing, social networking and other professional development practices for artists and arts organizations through real-world problem solving and application on the Clemson University campus or in the surrounding community. May be repeated for a maximum of nine credits.
- ART 3750 Writing for the Arts in Charleston 3-6(3-6)** Using Charleston's international Spoleto Festival USA as a laboratory, students engage in interdisciplinary, critical readings and observations of multiple elements of performing and visual arts programs, and write extensively about their place in a global, contemporary society. Students develop professional and technological literacies using print and digital media. Offered summer only. May be repeated for a maximum of six credits. Preq: ENGL 1030.
- ART 4050* Advanced Drawing 3 (6)** Advanced level studies of drawing which explore the synthesis of refined drawing skills and philosophies of art. Students' understanding of drawing as a form of art is developed through studio practice augmented by critiques, demonstrations, lectures, field trips, and independent research. Preq: ART 3050.
- ART 4070* Advanced Painting 3 (6)** Advanced studio course in painting. Students select painting media and develop a strong direction based on prior painting experience. Includes study of contemporary painters and directions. Preq: ART 3070.
- ART 4090* Advanced Sculpture 3 (6)** Intensive independent studio concentration to further develop personal direction and content. Emphasizes continued investigation of sculptural context, materials and processes, and relative historical research. Preq: ART 3090.
- ART 4110 *Advanced Printmaking 3 (6)** Culmination of process, techniques, and individual development. Students are expected to have mastered process and technique for the benefit of the image produced. Creativity and self-expression are highly emphasized as students select a process for concentrated study. Preq: ART 3110.
- ART 4130* Advanced Photography 3 (6)** Continuation of ART 3130. Advanced problems in photography. Preq: ART 3130.
- ART 4150 Advanced Graphic Design 3 (6)** Continuation of ART 3150. Personal expression through communication techniques is further explored. Individual projects are emphasized. Preq: ART 3150.
- ART 4160 Advanced Media Art: Interactive Objects and Environments 3 (6)** Students apply advanced media art production skills to create objects and environments that respond to user input or interaction. Tools used may include, but are not limited to, microcontrollers, sensors, RFID systems and electronic circuits, as well as traditional input devices. Preq: ART 3210.
- ART 4170* Advanced Ceramic Arts 3 (6)** Students are directed toward further development of ideas and skills. Glaze calculation and firing processes are incorporated to allow for a dynamic integration of form and ideas. Preq: ART 3170.
- ART 4200* Selected Topics in Art 1-3(1-3)** Intense course in studio art. May be repeated for a maximum of six credits, but only if different topics are covered. Preq: Senior standing.
- ART 4210 Two-Dimensional Digital Animation 3 (6)** Exposes students to the principles of animation with traditional techniques, while incorporating the latest 2-D digital tools. Students also develop interactive animations and showcase their work via the Internet. Preq: ART 3210.
- ART 4550 Atelier InSite Creative Inquiry II 3 (6)** An in-depth examination and research of Site Specific Public Art as it currently exists. Course provides critically considered and appropriate artwork for new building projects on the Clemson University campus. Continuation of ART 3550. Open to students from a wide variety of programs who are interested in this interdisciplinary collaborative endeavor. Preq: ART 3550.
- ART 4710 Bachelor of Fine Arts Senior Studio I 3 (6)** Individual studio project directed by an instructor and determined by the student in consultation with the instructor. Focuses on a particular studio area, concept, or theme. May be repeated for a maximum of six credits. Preq: Senior standing and completion of 3000/400 sequence in the chosen studio area, minimum grade-point average of 3.0 in focus studio area, participation in senior studio interview. Coreq: ART 4730.
- ART 4720 Bachelor of Fine Arts Senior Studio II 4(12)** Individual studio project directed by an instructor and determined by the student in consultation with the instructor. Usually focuses upon a particular studio area, concept, or theme. Preq: ART 4710 with a B or better.
- ART 4730 Senior Seminar in Professional Career Preparation 3(3)** Seminar and practical guide to prepare students for entry into the professional art world. Focuses on issues concerning visual artists in the early years of their professional activities. Presents career options and practical information for the graduating senior, including portfolio development. Coreq: ART 4710.

ART 4740 Travel Seminar 1(1) Students travel with faculty to museums, galleries and festivals that directly affect studio practice, art history knowledge and engagement in historical and contemporary art practice. Students plan trips, conduct research, keep a journal and make presentations on works and sites visited and matters pertaining to professional practice. To be taken Pass/Fail only. May be repeated for a maximum of three credits. Preq: Junior standing.

ART 4750 Senior Exhibition Internship 1(3) Students complete various projects related to their BFA Senior Exhibition during this weekly internship through Clemson University's Lee Gallery. The internship compliments the BFA studio curriculum by providing students access to professional practices in exhibition design and execution. Preq: ART 4710.

ART 4890 Art and Art History Internship 1-3(1-3) Internship with an approved sponsoring art institution in support of professional development and best art practices. May be repeated for a maximum of six credits. Preq: Junior standing in Visual Arts and consent of instructor and acceptance by sponsor.

ART 4900* Directed Studies 1-5(1-5) Study of areas in the visual arts not included in other courses or additional advanced work. Must be arranged with a specific instructor prior to registration. May be repeated for a maximum of 18 credits. Includes Honors sections. Preq: Consent of instructor.

AEROSPACE STUDIES

Professor: C.R. Mann, *Chair:* *Assistant Professors:* B.M. Lusk, M.A. Moore, R.M. Miller

AS 1090 Air Force Today I 2(1) Deals with Air Force in the contemporary world through a study of the total force structure: strategic offensive and defensive, general purpose, and aerospace support. Leadership laboratory activities include drill fundamentals, customs, and courtesies of the service. Coreq: AS 1091.

AS 1091 Air Force Today I Laboratory 0(2) Non-credit laboratory to accompany AS 1090. Coreq: AS 1090.

AS 1100 Air Force Today II 2(1) Continuation of AS 1090. Leadership laboratory includes drill, ceremonies, and an introduction to Air Force career opportunities. Coreq: AS 1101.

AS 1101 Air Force Today II Laboratory 0(2) Non-credit laboratory to accompany AS 1100. Coreq: AS 1100.

AS 2090 Development of Air Power I 2(1) Study of the development of air power from balloons and dirigibles through the peaceful employment of U.S. air power in relief missions and civic action programs in the late 1960s and also the air war in Southeast Asia. Leadership laboratory provides experience in guiding, directing, and controlling an Air Force unit. Coreq: AS 2091.

AS 2091 Development of Air Power I Laboratory 0(2) Non-credit laboratory to accompany AS 2090. Coreq: AS 2090.

AS 2100 Development of Air Power II 2(1) Continuation of AS 2090. Coreq: AS 2101.

AS 2101 Development of Air Power II Laboratory 0(2) Non-credit laboratory to accompany AS 2100. Coreq: AS 2100.

AS 3090 Air Force Leadership and Management I 4(3) Emphasizes the individual as a manager. Individual motivational and behavioral processes, leadership, communication, and group dynamics are covered to provide a foundation for the development of the Air Force officer's professional skills. Students prepare individual and group presentations, write reports, participate in group discussions, seminars, and conferences. Coreq: AS 3091.

AS 3091 Air Force Leadership and Management I Laboratory 0(2) Non-credit laboratory to accompany AS 3090. Coreq: AS 3090.

AS 3100 Air Force Leadership and Management II 4(3) Continuation of AS 3090. Uses the basic managerial processes involving decision making, utilization of analytical aids in planning, organizing, and controlling environment. Actual case studies are used to enhance learning and communication processes. Coreq: AS 3101.

AS 3101 Air Force Leadership and Management II Laboratory 0(2) Non-credit laboratory to accompany AS 3100. Coreq: AS 3100.

AS 4090 National Security Policy I 4(3) Analysis of the role and function of the military officer in a democratic society and the relationships involved in civil-military interactions. Students prepare individual and group presentations, write reports, and participate in group discussions. Coreq: AS 4091.

AS 4091 National Security Policy I Laboratory 0(2) Non-credit laboratory to accompany AS 4090. Coreq: AS 4090.

AS 4100 National Security Policy II 4(3) Continuation of AS 4090. Examines the environmental context in which U.S. defense policy is formulated and implemented. Emphasizes initial commissioned service and military justice. Students prepare individual and group presentations for the class, write reports, and participate in group discussions, seminars, and conferences. Coreq: AS 4101.

AS 4101 National Security Policy II Laboratory 0(2) Non-credit laboratory to accompany AS 4100. Coreq: AS 4100.

AMERICAN SIGN LANGUAGE

Assistant Professor: S. Fitzmaurice; *Lecturer:* K. Misener Dunn

ASL 1010 American Sign Language I 4(3) Introduction to the basics of American Sign Language, its history, and culture. Visual-gestural communication techniques are used. Coreq: ASL 1011.

ASL 1011 American Sign Language I Laboratory 0(1) Non-credit laboratory to accompany ASL 1010. Coreq: ASL 1010.

ASL 1020 American Sign Language I 4(3) Continuation of ASL 1010 and culture to develop further communicative competencies. Proficiency oriented with the use of visual-gestural communication skills. Preq: ASL 1010. Coreq: ASL 1021.

ASL 1021 American Sign Language I Laboratory 0(1) Non-credit laboratory to accompany ASL 1020. Coreq: ASL 1020.

ASL 2010 American Sign Language II 3(3) Continuation of ASL 1020. Covers additional vocabulary, sentences, and grammar structures. Main focus is on conversational and receptive skills as well as a better understanding of Deaf culture. Preq: ASL 1020.

ASL 2020 American Sign Language II 3(3) Continuation of ASL 2010, concentrating on intermediate conversational and discourse skills using American Sign Language, more complex American Sign Language grammar, reading comprehension, and composition of short stories, narratives, and dialogues with an emphasis on topics related to the Deaf community. Class is conducted totally in American Sign Language using visual-gestural communicative techniques. Preq: ASL 2010.

ASL 2970 Creative Inquiry–American Sign Language 1-4(1-4) In consultation with and under the direction of a faculty member, students pursue scholarly activities individually or in teams. Preq: Consent of faculty member because arrangements with faculty member must be established prior to registration.

ASL 3000 Fingerspelling and Numbers in American Sign Language 1(1) Advanced study of the manual alphabet (fingerspelling) and the numerical system in American Sign Language, with extensive practice in both expressive and receptive skills. Preq: ASL 2010.

ASL 3010 Advanced American Sign Language I 3(3) Focuses on American Sign Language fluency, vocabulary development, grammatical structures of American Sign Language, use of classifiers, conversational skills, translating written texts into American Sign Language, and vice versa. Emphasis is on making formal presentations in American Sign Language. Preq: ASL 2020.

ASL 3020 Advanced American Sign Language II 3(3) Continuation of ASL 3010. Focuses on American Sign Language fluency, vocabulary development, grammatical structures of American Sign Language, use of classifiers, conversational skills, translating written texts into American Sign Language, and vice versa. Emphasis is on making formal presentations in American Sign Language. Preq: ASL 3010.

ASL 3040 Internship in American Sign Language 3 (4) Minimum 60 contact hours in an environment exclusively using American Sign Language. Frequent opportunities to converse with native signers in classroom settings, dormitory settings, meals, excursions, sporting events, cultural events, and meetings. Preq: ASL 2020.

ASL 3050 Deaf Studies in the United States 3(3) In-depth look into language, culture, and daily lives of approximately one million people who use American Sign Language as their primary language. Traces the roots of American Sign Language from pre-revolutionary times to current science and knowledge and how it applies to professional fields. Preq: ASL 2020.